DRAFT ENVIRONMENTAL ASSESSMENT
for the proposed
Heavy Water Haulers, Inc.
Land Application Site
Melstone, Montana

Solid Waste Section
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September 12, 2019

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ACRONYMS

HWH – Heavy Water Haulers, Inc.

ARM – Administrative Rules of Montana

AAR– Annual Average Rate

Draft EA – Draft version of an environmental assessment

DEQ – Montana Department of Environmental Quality

EA – Environmental Assessment

EIS – Environmental Impact Statement

GWIC – Ground Water Information Center

MCA – Montana Code Annotated

MEPA – Montana Environmental Policy Act

MNHP – Montana Natural Heritage Program

O&M – Operation and Maintenance

Proposed Action – Licensing a new septage land application site

Septic Rules– ARM Title 17, chapter 50, subchapter 8, "Cesspool, Septic Tank, and Privy Cleaners"

SDLA – Septic Disposal Licensure Act

Site – Approximately 50 acres of property located approximately seven miles northeast of Melstone, Montana, south of U.S. Highway 12, in Rosebud County, Montana.

SWL – Static Water Levels

USFWS – United States Fish and Wildlife Service

1. NEED FOR PROPOSED ACTION

1.1 SUMMARY

This draft environmental assessment (Draft EA) was prepared in accordance with the Montana Environmental Policy Act (MEPA). On August 13, 2018, the Department of Environmental Quality (DEQ) received an application from Heavy Water Haulers, Inc. (HWH) for licensing a new land application site (Proposed Action). HWH proposes the land application of septage and graywater on approximately 50 acres of property located approximately seven miles northeast of Melstone, Montana, south of U.S. Highway 12, in Rosebud County, Montana (Site, **Figure 1**).

1.2 BACKGROUND

The applicant solely selected the Site, and Rosebud County approved the Site, which initiated the MEPA process. The MEPA process is a method that informs the public about project alternatives and potential impacts and allows for public input on the Proposed Action. In accordance with MEPA process guidelines, the Draft EA determines the potential for impacts to the environment due to the Proposed Action.

1.3 STATE ACTION

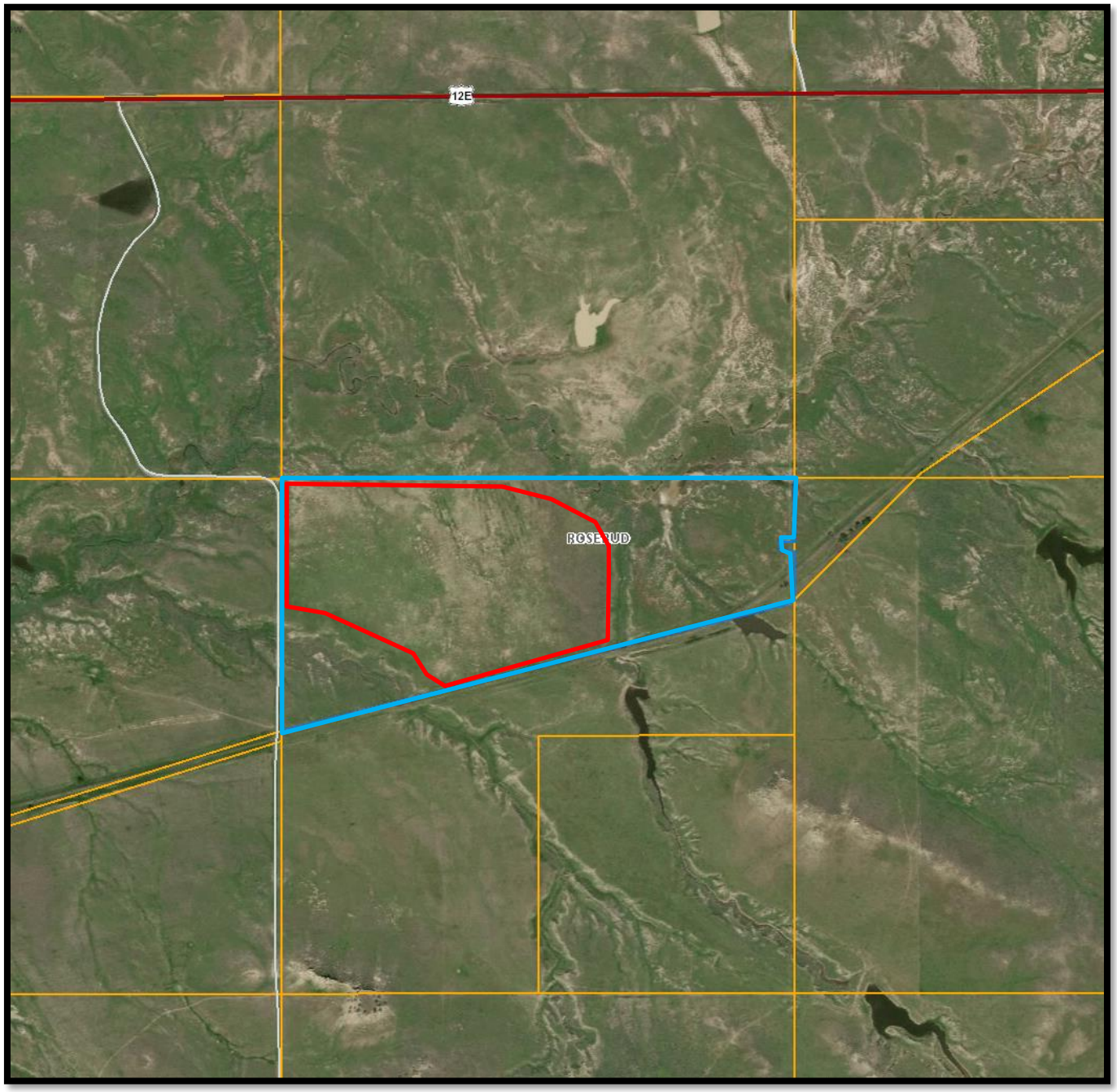
HWH must obtain a license issued by DEQ before it may pump or land apply septage in Montana. DEQ's decision to approve or deny the Site depends upon the consistency of the Proposed Action with the Septage Disposal Licensure Act (SDLA); the Administrative Rules of Montana (ARM) Title 17, chapter 50, subchapter 8, "Cesspool, Septic Tank, and Privy Cleaners" (Septic Rules); the Montana Clean Air Act; and the Montana Water Quality Act.

1.4 PURPOSE AND NEED

HWH has applied for a license to spread and treat septage by land application. Septage is the liquid and solid material removed from a septic tank, cesspool, portable toilet, or similar treatment works that only receive domestic waste and wastewater from humans or household operations. The Septic Rules establish minimum requirements for the pumping and land application of septage. The application is assessed by DEQ to approve or deny the Proposed Action.

When properly managed, land application of septage is a beneficial resource, providing economic and environmental benefits with no adverse public health effects. A properly managed land application program recognizes the benefits of septage and employs practices to maximize those benefits. Septage contains nutrients that can reduce the reliance of the farmer on chemical fertilizers to improve soil. Septage, when land applied as a soil conditioner, is beneficial use rather than a disposal. The Proposed Action would add valuable moisture, organic matter, and nutrients to the topsoil, improving the soil tilth and crop production on the Site. Septage does not include prohibited material (e.g., garbage or tampons) removed from a septic tank or similar treatment works.

Figure 1: Proposed Land Application Site
(*Site outlined in red; McCaffree property outlined in blue; surrounding property boundaries outlined in orange*)

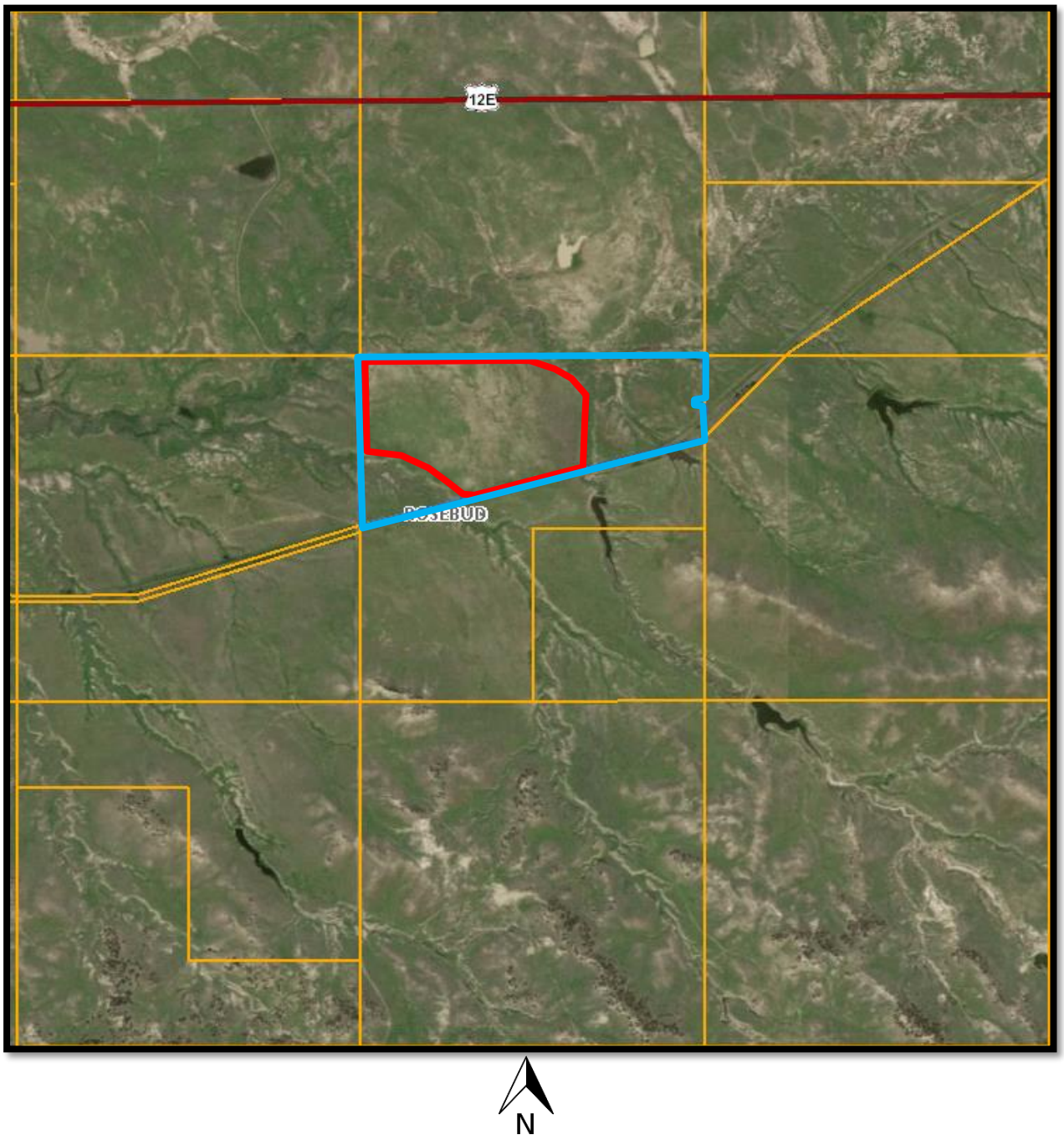


*Source: Montana Cadastral (**NOT TO SCALE**)*

1.5 LOCATION DESCRIPTION AND STUDY AREA

The Site is located seven miles northeast of Melstone, south of U.S. Highway 12. A private road would be used to access the Site (**Figure 1**).

Figure 2: Study Area
(Site in red, McCaffree property in blue)



*Source: Montana Cadastral (**NOT TO SCALE**)*

The study area perimeter (not shown) extends approximately one mile beyond the boundaries of the Site (**Figure 2**).

The Site is located on the McCaffree property, located in Section 14, Township 10 North, Range 32 East, in Rosebud County, Montana (**Figure 1**). Currently, the Site is open prairie. The Site would be split into two parcels. Land application would be rotated annually between the parcels. The McCaffree property's boundary is shown in **Figures 1** and **2**.

1.6 REGULATORY RESPONSIBILITIES AND REQUIREMENTS

In reviewing HWH's application for a new land application site, DEQ must comply with MEPA and the SDLA, including applicable Septic Rules. MEPA procedures direct DEQ to:

- Analyze the Proposed Action for potential environmental impacts
- Publish its findings in an environmental assessment (EA) for public review
- Solicit public comments prior to its decision in accordance with § 75-1-102 of the Montana Code Annotated (MCA).

Upon completing the EA, DEQ may:

- Approve the new land application site
- Deny the new land application site
- Expand upon the EA
- Write an environmental impact statement (EIS)

If the Proposed Action is approved, DEQ will be responsible for conducting inspections of the Site to ensure compliance with the Septic Rules. If violations are noted, DEQ will assist the applicant in returning to compliance. If the applicant fails to comply, DEQ may rescind licensure of the Proposed Action at the Site.

1.7 PUBLIC PARTICIPATION

DEQ is releasing this Draft EA to present the initial findings described in Section 4.2. A 30-day public comment period begins the day the Draft EA is released. The Draft EA, or notice of how to access it, has been sent to adjacent landowners and other interested parties, and there's a public notice in the local newspaper. The public notice and Draft EA may be viewed at: https://deq.mt.gov/public/ea/SepticPumpers

DEQ is required by MEPA to disclose any potential impacts to the physical environment that could result from the Proposed Action. The Draft EA's function is to:

1. Report the results of DEQ's environmental assessment to the public
2. Determine if an EIS is needed

This Draft EA is a procedural document that outlines the processes DEQ followed during its assessment. The Draft EA identifies the potential impacts of the Proposed Action. The MEPA process does not extend DEQ's regulatory authority beyond the SDLA and Septic Rules. It

does, however, assist agencies in making balanced decisions by seeking public review and input.

DEQ is releasing this Draft EA to:

- Inform interested and affected parties
- Increase public understanding of the SDLA and Septic Rules
- Discuss the applicant's objectives and operational procedures
- Evaluate compliance with applicable laws and rules
- Disclose the significance of potential environmental impacts
- Seek public input regarding the Proposed Action
- Seek public input regarding DEQ's assessment of potential impacts

2. PROPOSED ACTION

MEPA may require the evaluation of reasonable alternatives to the Proposed Action, according to ARM 17.4.609(3)(f). However, § 75-1-220, MCA states that unless a project is state-sponsored, DEQ's assessment of an alternative site is not required.

DEQ has not considered mitigation alternatives for potential impacts because they're contained in HWH's application and a public record.

2.1 LAND APPLICATION SITE OPERATIONS

The operational and setback requirements for land application of septage at this Site are provided in **Tables 1** and **2**:

Table 1: Land Application Operational Requirements

ARM Reference	Specific Restrictions
17.50.809(10)	All non-putrescible litter must be removed from the land application site within 6 hours of application.
17.50.809(12)	Pumpings may not be applied at a rate greater than the annual application rate (AAR) of the site for crop nitrogen requirement on an annual basis.
17.50.810(1)	Pumpings may not be applied to flooded, frozen, or snow-covered ground if the pumpings may enter state waters.
17.50.811(3)	Pumpings may be applied only if the person first performs one of the following vector attraction and pathogen reduction methods: • injection below the land surface so no significant amount remains on the land surface within one-hour of injection; • incorporation into the soil surface's plow layer within 6 hours of application; • addition of alkali material so that the pH is raised to and remains at 12 or higher for a period of at least 30 minutes; or, • management as required by 17.50.810 when the ground is frozen

Table 2: Land Application Site Setback Requirements

ARM Reference	Specific Restrictions
17.50.809(1)	Pumpings may not be applied to land within 500 feet of any occupied or inhabitable building.
17.50.809(2)	Pumpings may not be applied to land within 150 feet of any state surface water, including ephemeral or intermittent drainages and wetlands.
17.50.809(3)	Pumpings may not be applied to land within 100 feet of any state, federal, county, or city-maintained highway or road.
17.50.809(4)	Pumpings may not be applied to land within 100 feet of a drinking water supply source.
17.50.809(6)	Pumpings may not be applied to land with slopes greater than 6%.
17.50.809(8)	Pumpings may not be applied to land where seasonally high groundwater is 6 feet or less below ground surface.

Land application would be limited to areas approved by DEQ. Areas within the Site would not be used until their boundaries have been marked and approved by DEQ or the local county sanitarian.

HWH would be required to log the type and amount of septage they land applied and the date they applied it. These logs would be submitted twice a year to DEQ. DEQ would verify the Site's annual application rate (AAR).

2.2 EQUIPMENT AVAILABLE AND PUMPER TRUCK REQUIREMENTS

HWH has the following equipment available for land application activities:

1. 1992 Peterbilt 379 with a 4,000-gallon vacuum tank (for septage disposal)
2. 2007 Kenworth W900 with a 5,000-gallon vacuum trailer (for septage disposal)
3. John Deere 1010 tractor
4. Disc
5. Harrow

The Septic Tank, Cesspool, and Privy Cleaner Vehicle Inspection Form was created by DEQ to guide the vehicle inspection. The county health officer's or designated representative's signature on the vehicle inspection form certifies that the vehicle is equipped with the necessary equipment to adequately screen and spread septage while land applying. The following questions are on the form to verify compliance with the Septic Rules:

1. Does the vehicle show signs of leakage?
2. Is the vehicle equipped with the proper spreading equipment?
3. Is the spreading equipment mounted on the vehicle or separate?
4. If required to screen septage before land applying, is the vehicle, or site, equipped with the proper screening equipment?

5. Is the spreading equipment approved for use?
6. Is the screening equipment approved for use?
7. Make/Model of Vehicle
8. Tank Size

2.3 AMOUNT AND EXTENT OF SEPTAGE APPLICATION

Land application would occur at a rate not exceeding the AAR in gallons per acre. For septage, the AAR is calculated based upon uptake by a specific crop or grass, as follows:

AAR = crop nitrogen requirement/0.0026 for septage waste;

Because septage and graywater would be land applied, the AAR is adjusted for the septage as it has higher nitrogen concentrations.

The grass at this location has a crop nitrogen requirement of 125 pounds per acre. The resulting AAR for septage is 24,039 gallons per acre, which is equal to approximately 0.89 inches of liquid applied per acre. For comparison, the average annual precipitation received during a calendar year in Melstone, Montana, is 13.8 inches over any acre.

Land application is alternated amongst parcels to allow crop uptake of excess nitrogen. When land application is rotated, the same location isn't used every year. For example, if 100 acres are proposed for land application, 50 acres would be used one year and the other 50 acres would be used the next year. In this case, the applicant would designate two areas to rotate, using one every other year (**Figure 1**).

The approximately 50 acres of McCaffree property would accommodate the estimated 20,000 gallons per year. Land application activities would not exceed the AAR.

3. AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES BY RESOURCE

3.1 LOCATION DESCRIPTION AND STUDY AREA

The Site is referenced in Section 1.1 of this Draft EA. The study area includes land and resources in and around the Site. DEQ staff visited the Site to observe resources, habitats, land uses, and species.

3.2 WILDLIFE AND HABITATS

The impact to wildlife and habitats would be minor. As a mitigation effort, HWH is required by the Department of Natural Resources and Conservation (DNRC) to begin land application activities after July 15th each year (DNRC, 2019).

Transient wildlife tends to avoid land application sites due to human scent and activities. Montana Fish, Wildlife & Parks (FWP) manages the overall wildlife populations in the region. Species of fish and amphibians are not included on the following lists because land application activities will not impact nearby waters (see Section 3.4.1).

The applicant does not plan to expand the Site. Therefore, no habitats outside the land application area would be impacted. Because of the limited development and low human population in the area, an adequate amount of similar habitat remains near the Site and can accommodate species forced to relocate due to the Proposed Action.

3.2.1 THREATENED AND ENDANGERED SPECIES

U.S. Fish & Wildlife Service's (USFWS) online databases were used to identify plant and animal species at the Site and study area (USFWS, 2019). The USFWS species and status listings for Rosebud County, Montana, are shown in **Table 3**:

Table 3: Federally Established Species List

Scientific Name	Common Name	Status
Canis lupus	Gray wolf	recovery
Mustela nigripes	Black-footed ferret	endangered
Myotis septentrionalis	Northern long-eared bat	threatened
Haliaeetus leucocephalus	Bald eagle	recovery
Sterna antillarum	Least tern	endangered
Calidris canutus rufa	Red knot	threatened
Calamospiza melanocorys	Lark bunting	bird of conservation concern

The Site does not provide the habitat necessary for the bald eagle, gray wolf, least tern, red knot, or northern long-eared bat.

Lark buntings are common to abundant breeding residents (May-August) east of the divide. Their habitat has been described as variable and difficult to characterize. They inhabit mixed-grass and shortgrass prairie, sagebrush steppe, saltbush shrublands, fallow fields, hayfields, weedy roadsides, and crop fields but generally avoid tallgrass prairie (Marks, 2016). Large flocks have been reported northeast of Ingomar, approximately 30 miles east of the Site. Inspection of the Site will be conducted prior to land application activities beginning July 15th each year. The presence of active nesting activity would require further inspection and notification of FWP.

The black-footed ferret population is closely monitored and "limited to just a couple of tribal reintroduction sites" (Hanauska-Brown, 2019).

3.2.2 SPECIES OF CONCERN

Designation as a species of concern is not a statutory or regulatory classification. Instead, these designations provide a basis for resource managers and decision-makers to make proactive decisions regarding species conservation.

The Montana Natural Heritage Program's (MNHP) online databases were accessed for listed species (MNHP, 2019). The MNHP species and status listing for Township 10 North, Range 32 East is shown in **Table 4**:

Table 4: Montana Recognized Species List

Scientific Name	Common Name	Status	GRank/SRank
Cynomys ludovicianus	Black-tailed Prairie Dog	species of concern	G4/S3
Centrocercus urophasianus	Greater Sage-Grouse	species of concern	G3G4/S2

The MNHP uses a standardized ranking system developed by The Nature Conservancy and maintained by NatureServe. Each species is assigned two ranks; one representing its global status (GRank), and one representing its status in the state (SRank). The scale is 1-5; 5 is common, widespread, and abundant; 1 means at high risk. Species with a GRank 5 are not included in **Table 4**.

The Site provides good habitat for the black-tailed prairie dog. Several mounded burrows were observed at the Site on November 29, 2018. No prairie dogs were observed during the Site visit. Inspection of the Site will be conducted prior to land application activities beginning July 15th each year. The presence of prairie dog activity would require further inspection and notification of FWP.

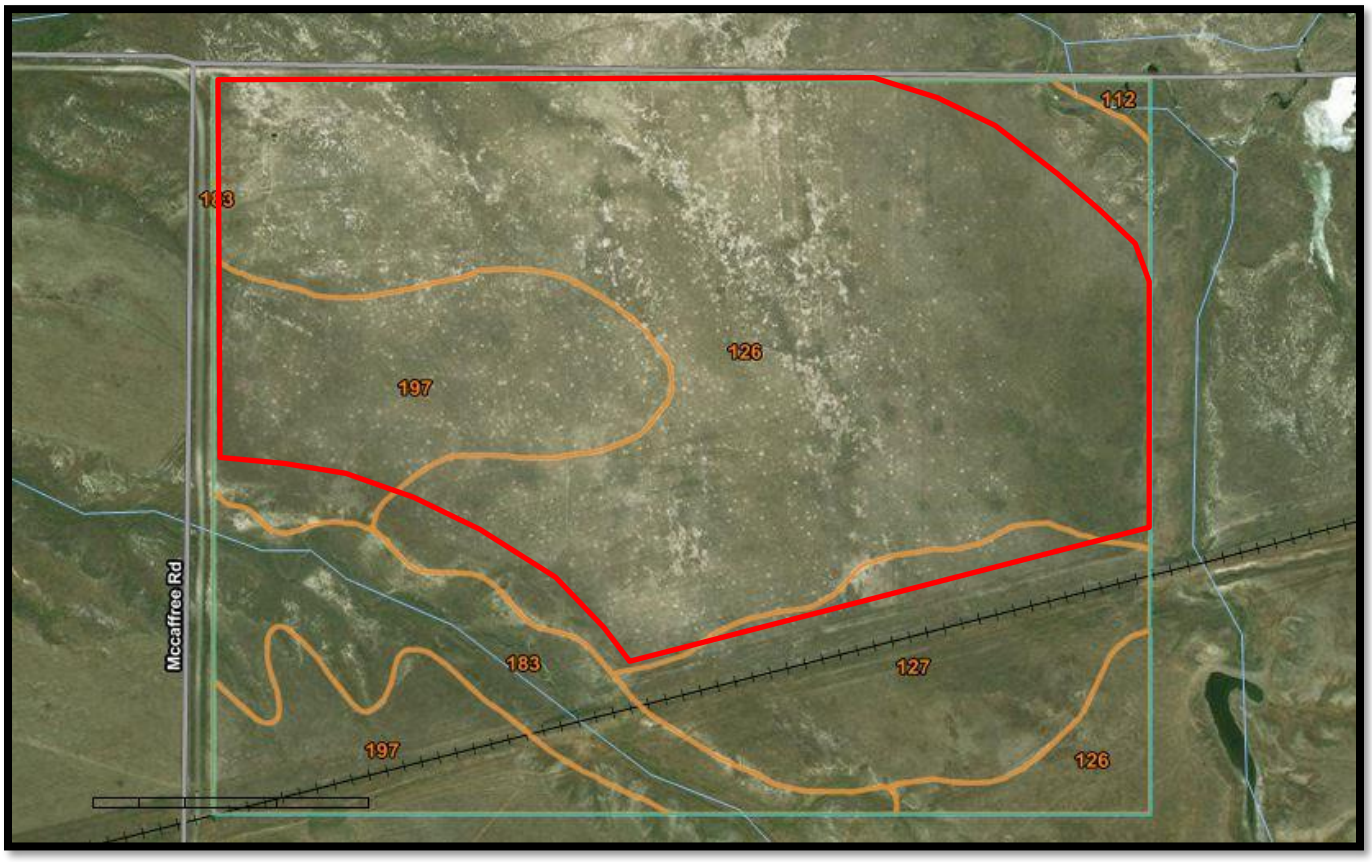
The Site is located within a Core Area for sage grouse, as designated by the DNRC. The DNRC conducted a Third Level Assessment for the Site and concluded that the areas of direct and indirect impacts from the project are of little to no value to sage grouse (DNRC, 2019).

3.3 SOILS AND VEGETATION

The impact to soils and vegetation would be minor.

The US Department of Agriculture (USDA) and Natural Resources Conservation Service's (NRCS) National Cooperative Soil Survey databases were accessed for information about the shallow subsurface soils at the Site and surrounding area (**Figure 3** and **Table 5**).

Figure 3: Soil Resource Map
(Soil unit with delineation in orange, *Site in red*)



*Source: USDA, Natural Resources Conservation Service (NRCS), 2019 (**NOT TO SCALE**)*

Table 5: USDA, NRCS, Custom Soil Resource Report, 2019

Map Unit Symbol	*Map Unit Name*	*Soil Rating*
112	*Kobar silty clay loam, gullied, 2 to 15 percent slopes*	*Very limited*
126	*Lonna silty clay loam, 0 to 2 percent slopes*	*Not limited*
127	*Lonna silty clay loam, 2 to 8 percent slopes*	*Somewhat limited*
183	*Ustic Torriorthents, 15 to 35 percent slopes*	*Not rated*
197	*Yamacall loam, warm, 0 to 2 percent slopes*	*Not limited*

The predominant soil types where the land application will occur is Yamacall loam (197) and Lonna silty clay loam (126). The ratings shown in **Table 5** are based on the soil properties that affect absorption, plant growth, microbial activity, erodibility, the rate at which the septage is applied, and the method by which the septage is applied. "Not limited" indicates that the soil has features that are very favorable for the specified use. Good performance and very low maintenance can be expected. "Somewhat limited" indicates that the soil has features that are moderately favorable for the specified use. "Very limited" indicates that the soil has one or more features that are unfavorable for the specified use (NRCS, 2019).

Thinly distributed grasses and very sparse sagebrush were observed during the Site visit. The quantity and quality of soils and vegetation at the Site would be enhanced by the Proposed Action.

3.4 HYDROLOGY

The analysis area for hydrology is the Site and the surrounding area. Some discussion of regional hydrogeology, based upon published reports, is also provided. The analysis methods for hydrology include reviewing wetland and jurisdictional waters information, onsite drilling reports, publications of the Montana Bureau of Mines and Geology, and topographic maps.

3.4.1 SURFACE WATER

No impacts to surface water are expected due to land application activities.

The Middle Musselshell watershed (USGS hydrologic unit code 10040202) is the principle drainage in the area, with the Musselshell River located 7 miles west of the Site. The Musselshell River flows north-northeast fed by snowmelt from nearby mountains. Home Creek flows east from the Musselshell River just outside of Melstone. Most of water from Home Creek is diverted for irrigation, with intermittent flows seen near the north border of the Site. Two coulees bisect the east portion of the property and one coulee clips the southwest corner (**Figure 1**). Setbacks will be maintained near the coulees to ensure no septage enters Home Creek.

3.4.2 GROUNDWATER

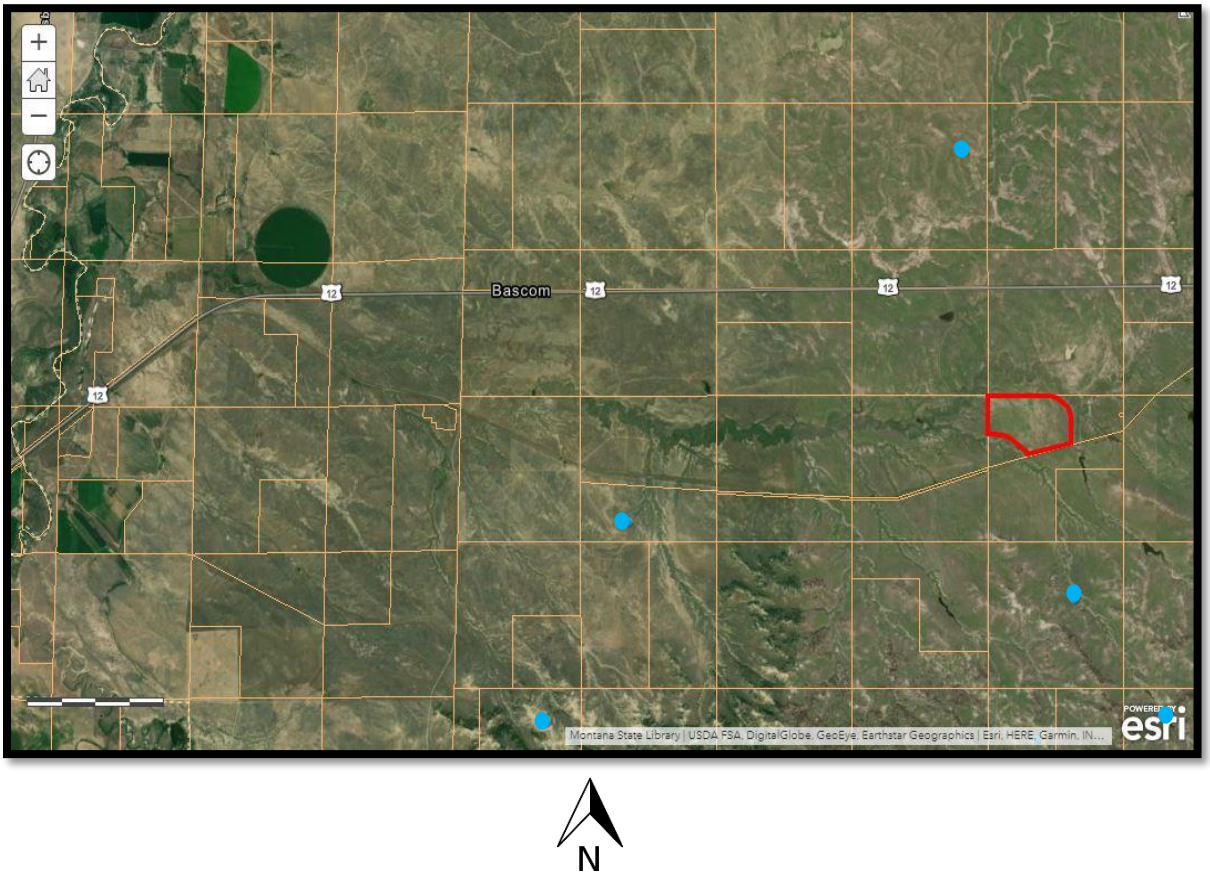
No impacts to groundwater or groundwater wells are expected due to land application activities.

Groundwater near the Musselshell River can be sourced from shallow coarse-grained Quaternary alluvium. As you travel east from the Musselshell River, the groundwater must be sourced from deeper sedimentary units. The Cretaceous Judith River, Bearpaw Shale, Fox Hills and Hells Creek formations, the Paleocene Fort Union formation, and Musselshell River Quaternary alluvium outcrop near Melstone (Miller, 1988). The yields and quality of water from these formations vary greatly. As a rule, the sandstones yield water that can be used for domestic and stock supplies, whereas the shales are non-water-bearing or yield only water of poor quality (Ellis and Meinzer, 1924).

The Montana Bureau of Mines and Geology's Ground Water Information Center (GWIC) is DEQ's reference for well data in Montana. All wells documented by GWIC when this Draft EA was written were considered. Any well not documented in GWIC is not included in this Draft EA, but if wells are proven to be within setbacks, the Site's boundaries would be adjusted to maintain the setbacks.

The nearest groundwater production well is located just over a mile south of the Site (**Figure 4**). The static water level in the well is approximately 45 feet below ground surface (bgs). The nearest groundwater production well heading west (towards the Musselshell River) has a static water level of 28 feet bgs (GWIC, 2019). In general, depth to groundwater increases with distance from the Musselshell River, so it can be assumed that groundwater beneath the Site is greater than 6 feet bgs.

Figure 4: Location of Nearby Groundwater Production Wells
(wells in blue circles, approximate Site boundaries outlined in red)



*Source: Esri/ArcGIS and GWIC, Montana Bureau of Mines and Geology (**NOT TO SCALE**)*

3.5 GEOLOGY

The Site is located within the Great Plains physiographic province and lies within the Central Montana Uplift. The Bull Mountains Basin lies to the southwest and the Sumatra Anticline to the northeast (**Figure 5**). The Sumatra anticline is responsible for the gentle rise seen on the horizon east of the Site. The Site sits on a high bench underlain by alternating beds of sandstone and shale that have been folded and differentially eroded. As a result, the plains are characterized by flat shale lowlands separated by sandstone ridges (Ellis and Meinzer, 1924). The mesas are cored by alternating sandstone and shale units, which have been preserved in part due to the burning of coal beds, which hardened the sandstone and shale units, rendering them resistant to erosion (Ellis and Meinser, 1924). A perfect example of this is the Bearpaw shale beneath the Site and the Lance/Foxhills sandstones outcropping to form a perfect mesa approximately a half mile south of the Site (**Figure 5**).

Figure 5: Regional Geology Map

Symbols: Qal – Alluvium of modern channels and flood plains, Qat – Alluvium of alluvial terrace deposits, Kb – Bearpaw Shale, Kl – Lance Formation, Kfh – Fox Hills Formation, Kjr – Judith River Formation

Source: MBMG, Vuke and Wilde, 2004 (Revised)

3.6 CLIMATE

DEQ analyzed how the land application of septage would impact the Site's environment given the climate of the region.

Analysis methods for climate included a site visit and researching data from following this link: *http://www.weatherbase.com/weather/weather.php3?s=695542&cityname=Melstone-Montana-United-States-of-America*

The climate in the area is typical of central and eastern Montana and is classified as warm summer continental climate. **Table 7** summarizes climate data for Melstone, Montana. The average temperature for the year in Melstone is 47 degrees, with July being the warmest month. The coolest month is January. The annual precipitation is 13.8 inches, with June being the wettest month at 2.8 inches. The least precipitation occurs from November through March.

Table 6: Climate Data for Melstone, Montana

MONTHLY - WEATHER AVERAGES SUMMARY [Show All Data] [°C] °F

Average Temperature Years on Record: 102

	ANNUAL	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
F	47	21.6	26.9	35.4	46.4	56	64.5	72.5	70.8	60	48.5	35.5	25.5

Average High Temperature Years on Record: 102

	ANNUAL	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
F	61	33.7	39.3	48.2	60.4	70.3	79	89.1	87.9	76.3	63.4	47.7	37.1

Average Low Temperature Years on Record: 102

	ANNUAL	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
F	32.9	9.7	14.4	22.5	32.4	41.7	50.1	55.9	53.6	43.7	33.7	22.8	14

Average Precipitation Years on Record: 102

	ANNUAL	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
in	13.8	0.5	0.4	0.7	1.2	2.2	2.8	1.5	1.1	1.2	1	0.5	0.6

Average Number of Days With Precipitation Years on Record: 102

	ANNUAL	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Days	73	5	4	6	7	9	10	7	5	6	5	4	5

Source: www.weatherbase.com

Net evaporation rates were obtained and evaluated from the Western Regional Climate Center to ensure the Site could properly utilize the increase in moisture. The net evaporation rates for the Huntley Experiment Station location were used due to its proximity to the Site and similarity in climate. The monthly average pan evaporation is listed as 41.27 inches per year. Data was recorded from 1911 - 2005. On average, there is zero evaporation shown between October and March, but averages per month include 5.03 inches for April, 6.71 inches for May, 7.4 inches for June, 8.88 inches for July, 8.15 inches for August, and 5.1 inches for September. These averages correlate to the hot, dry months of a Montana summer.

The hot, dry months of July, August, and September correlate to the average Montana septic tank pumper's busy season. Dry soils, vegetation, and crops would benefit from the added moisture.

3.7 AESTHETICS

No impacts on aesthetics are expected due to land application activities.

The Site is not visible from U.S. Highway 12. A private road would be used to access the Site. The Site is not located on a prominent topographical feature. No other development is anticipated at the Site.

DEQ and/or the local county sanitarian would respond to complaints about odor to determine if wastes were not properly managed. With proper management, odors would be minimized. The naturally occurring bacteria in the soil uses carbon in the waste as a fuel source. This activity results in the breakdown of wastes, which include odors. Usually, odors are only detected close to the land application activity.

3.8 HUMAN HEALTH & SAFETY

No impacts on human health and safety are expected due to land application activities.

Septage would be land applied at the Site. The dispersive mechanism, attached to the pumper truck, would apply waste in a wide, thin, even layer. Septage would be incorporated into the soil surface within six hours of application. No livestock grazing areas exist on the Site. No crops are harvested from the Site.

Access into the Site, via a private road, is controlled by a fence and gate.

3.9. DEMAND FOR GOVERNMENT SERVICES

The impact to the demand for government services would be minor.

The government resources that would be utilized for the oversight of the operation and maintenance of this Site would be the Rosebud County sanitarian and DEQ. The Rosebud County sanitarian and DEQ staff would conduct periodic inspections of land application activities at the Site. Volumes of waste applied at the Site would also be monitored by DEQ to ensure the AAR is not exceeded. Site inspections are performed at all septic tank pumper land application sites.

3.10 TRAFFIC

The impact to traffic would be minor.

There would not be a significant increase in traffic on U.S. Highway 12. HWH would be operating one pumper truck at a time. The Site would be accessed from U.S. Highway 12 via a

private road. U.S. Highway 12, which would be used by the applicant's truck, currently supports traffic to homes and businesses in the area.

4. CONCLUSIONS AND FINDINGS

4.1 EVALUATION OF MITIGATIONS, STIPULATIONS, AND OTHER CONTROLS ENFORCEABLE BY DEQ OR ANOTHER GOVERNMENT AGENCY

The Site and the O&M plan meet the requirements of the SDLA, Air and Water Quality Acts, and other applicable Montana environmental laws and regulations, as well as county ordinances. Adherence to the regulations and to the approved O&M plan would mitigate the potential for harmful releases and impacts to human health and the environment from the Proposed Action at the Site.

4.2 FINDINGS

Based on consideration of all the criteria set forth in ARM 17.4.608, DEQ has determined the Proposed Action would not impact human health. Therefore, an EA is the appropriate level of environmental review, and an EIS is not required.

The depth and breadth of the project are typical of a land application site. DEQ's analysis of potential impacts from the Proposed Action are appropriate for the complexity, environmental sensitivity, degree of uncertainty, and mitigating factors provided by the Septic Rules for each resource considered.

To determine whether preparation of an EIS is necessary, DEQ is required to determine the significance of impacts associated with the Proposed Action. The criteria that DEQ is required to consider in making this determination are set forth in ARM 17.4.608(1)(a) through (g):

(a) The severity, duration, geographic extent, and frequency of occurrence of the impact;

(b) The probability that the impact will occur if the Proposed Action occurs; or conversely, reasonable assurance in keeping with the potential severity of an impact that the impact will not occur;

(c) Growth-inducing or growth-inhibiting aspects of the impact, including the relationship or contribution of the impact to cumulative impacts;

(d) The quantity and quality of each environmental resource or value that would be affected, including the uniqueness and fragility of those resources or values;

(e) The importance to the state and to society of each environmental resource or value that would be affected;

(f) Any precedent that would be set because of an impact of the Proposed Action that would commit DEQ to future actions with significant impacts or a decision in principle about such future actions; and

(g) Potential conflict with local, state, or federal laws, requirements, or formal plans.

The Site's location is described in Section 1.5 of this Draft EA. It encompasses approximately 50 acres of the McCaffree property.

The Proposed Action is expected to improve habitats (soils and vegetation) at the Site.

The Proposed Action is not expected to impact surface water resources. Operational standards require all the setback requirements from surface water and slopes exceeding 6% are met, as described in Section 3.4.1 of this Draft EA.

The Proposed Action is not expected to impact groundwater. The site is well within the setback requirements for groundwater, as described in **Table 2** of this Draft EA.

DEQ has not identified any growth-inducing or growth-inhibiting aspects of the Proposed Action. DEQ's approval is not a decision regarding, in principle, any future actions that DEQ may perform. Furthermore, approval doesn't set any precedent or commit DEQ to any future action. Finally, the Proposed Action does not conflict with any local, state, or federal laws, requirements, or formal plans.

5. OTHER GROUPS OR AGENCIES CONTACTED OR THAT MAY HAVE OVERLAPPING JURISDICTION

Rosebud County Environmental Health Department
United States Department of Agriculture
Montana Natural Heritage Program
Montana Department of Environmental Quality
Montana Historical Society State Historic Preservation Office
United States Geological Survey
Montana Bureau of Mines and Geology
US Fish & Wildlife Service
Montana Sage Grouse Habitat Conservation Program

6. AUTHORS

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Septic Tank Pumper Program

Date: September 12, 2019

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